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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,812	10/30/2003	Michele Covell	200313228-1	2456
22879	7590	08/09/2007		
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER HOANG, HIEU T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/698,812

Applicant(s)

COVELL ET AL.

Examiner

Hieu T. Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to communication filed on 07/16/2007.
2. Claims 1-44 are pending and presented for examination.

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive.
4. 35 USC § 101. Applicant argues that a computer usable medium having computer code embodied therein for causing a computer to perform operations cannot be paper means. The examiner respectfully traverses. As an example, a piece of paper can be scanned and processed by a Optical character recognition software before computer codes can be read by the processor. Therefore, it is a reasonable interpretation to read the claimed "a computer usable medium" as a paper medium.

Furthermore, since no explicit definition of "a computer usable medium" is found in the specification, it is a reasonable interpretation to read "a computer usable medium" over all computer usable media as a transmission medium or transmission link such as optical or wired or wireless links. Transmission link is non-statutory. Therefore, claims 4 and 35-44 are directed to non-statutory subject matter.

5. 35 USC § 102 and 103. The only main argument is on pages 10 and 11 of the Remarks wherein the applicant argues that the prior art does not teach: "selecting a service provider from a plurality of service providers based on static service provider

information and static network information". The examiner respectfully traverses the argument.

6. Referring to the specification, on page 6 second paragraph, applicant depicts static resource information or static network and service provider information comprises "computational and memory resources of the network coupled devices, expected bandwidth/latency between servers, dispatch history, network proximity, session information (e.g. session initiation and termination information) and client/content addresses... encryption or compression."

7. The examiner submits that the prior art discloses just that (Menditto, col. 3 lines 11-16, determining content provider location including servers in the best proximity (or network proximity), col. 3 lines 51-61, select a best server and network connection that provide fastest delivery (or expected bandwidth/latency between servers), a best server with the least load, or best memory and computing resources (or computational and memory resources of the network coupled devices), with security (or encryption, compression), and col. 3 lines 61-66, static content cached for delivery (or session information and dispatch history))

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 4 and 35-44 are rejected under 35 U.S.C. 101 as the claimed invention is directed to non-statutory subject matter. "A computer usable medium having computer

usable code embodied therein” can be a piece of paper having written thereon instructions of a software program, and is therefore non-statutory.

Furthermore, since no explicit definition of “a computer usable medium” is found in the specification, it is a reasonable interpretation to read a computer usable medium as a transmission medium or transmission link such as optical or wired or wireless links. Transmission link is non-statutory. Therefore, claims 4 and 35-44 are directed under U.S.C 101 as the claimed invention is related to non-statutory subject matter.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-4, 15-17, and 35-37 rejected under 35 U.S.C. 102(e) as being anticipated by Menditto et al. (US 6,981,029, hereafter Menditto).

12. For claim 1, Menditto discloses a method of selecting a media service provider based on static resource information, said method comprising:

- identifying a type of service to be performed on an item of content, wherein said item of content is identified during a session with a client device (col. 12, lines 23-

27, a JPEG image request that requires additional processing in a session between a user and a web page, e.g. lfm.com);

- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and
- providing information for transferring said session to said service provider, wherein said service provider performs said service on said item of content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

13. For claim 2, Menditto discloses a system for providing content to a client device, said system comprising:

- a service manager that selects a service provider that is capable of performing a service on an item of content from among a plurality of service providers based on static service provider information and static network information (fig. 2, col. 3 lines 11-16 and 51-61, content gateway selecting a best server that will deliver

content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource);

- said service manager further selecting said service provider based on service session information if said service session information has been received (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

14. For claim 3, Menditto discloses a computer system comprising: a processor; a memory device comprising computer executable instructions stored therein for performing a method for selecting a media service provider based on static resource information comprising:

- identifying a type of service to be performed on an item of content, wherein said item of content is identified during a session with a client device (col. 12, lines 23-27, a JPEG image request that requires additional processing in a session between a user and a web page, e.g. lfm.com);
- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with

required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and

- providing information for transferring said session to said service provider, wherein said service provider performs said service on said item of content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

15. For claim 4, Menditto discloses a computer useable medium having computer useable code embodied therein for causing a computer to perform operations comprising:

- identifying a type of service to be performed on an item of content, wherein said item of content is identified during a session with a client device (col. 12, lines 23-27, a JPEG image request that requires additional processing in a session between a user and a web page, e.g. lfm.com);
- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and

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- providing information for transferring said session to said service provider, wherein said service provider performs said service on said item of content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

16. For claim 15, Menditto discloses a system for providing streaming media content to a client device, said system comprising:

- a service manager that selects a service provider that is capable of performing a service on an item of streaming content from among a plurality of service providers based on static service provider information and static network information (fig. 2, col. 3 lines 11-16 and 51-61, content gateway selecting a best server that will deliver content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource),
- said service manager further selecting said service provider based on service session information if said service session information has been received (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

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17. For claim 35, Menditto further discloses a computer useable medium having computer useable code embodied therein for causing a computer to perform operations comprising:

- identifying a type of service to be performed on an item of streaming content, wherein said item of streaming content is identified during a session with a client device (col. 12, lines 23-27, a JPEG image request that requires additional processing in a session between a user and a web page, e.g. lfm.com);
- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and
- providing information for transferring said session to said service provider, wherein said service provider performs said service on said item of streaming content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

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18. For claims 16 and 36, Menditto further discloses said static service provider and network information is accessible by a service location manager (Menditto, col. 3 lines 51-61).

19. For claims 17 and 37, Menditto further discloses said static service provider and network information comprises information concerning computational and memory resources, connectivity and expected bandwidth and latency between servers (col.3 line 60, which server is most heavily loaded, meaning available computational and memory resources and bandwidth are considered, col. 2 lines 64-66, best response time or best latency), client and content addresses (col. 6 lines 25-30), session dispatch history (col. 4 lines 32-34, requests for components of a same web page belong to a same session), network proximity (col. 3, lines 11-16) and the identity of special purpose hardware (fig. 2, hardware such as content gateway, CDN, and content servers have corresponding IP addresses).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 5-14, 18-34, and 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menditto, as applied to claims 15, 17, 35, and 37 above, in view of

Bochmann et al. (Quality of service management issues in electronic commerce applications, hereafter Bochmann).

22. For claim 5, Menditto discloses method of selecting a media service provider for media based on static resource information, said method comprising:

- identifying a type of service to be performed on an item of content, wherein said item of streaming content is identified during a session with a client device (col. 12, lines 23-27, a JPEG image request that requires additional processing in a session between a user and a web page, e.g. lfm.com);
- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and
- providing information for transferring said session to said service provider, wherein said service provider performs said service on said item of content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

Menditto does not explicitly disclose that the media is a streaming media.

However, Bochmann discloses the media is a streaming media (section 1-introduction, section 4, selection of server from a pool of servers for multimedia sessions such as video-on-demand using a QoS-broker)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Menditto and Bochmann in order to provide a multimedia QoS management scheme in order to optimize the overall cost-performance of the system and the users satisfaction (Bochmann, section 1-introduction)

23. For claim 25, Menditto further discloses computer system comprising: a processor; a memory device comprising computer executable instructions stored therein for performing a method for selecting a media service provider based on static resource information comprising:

- identifying a type of service to be performed on an item of content, wherein said item of streaming content is identified during a session with a client device (col. 12, lines 23-27, a JPEG image request that requires additional processing in a session between a user and a web page, e.g. lfm.com);
- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with

required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and

- providing information for transferring said session to said service provider, wherein said service provider performs said service on said item of content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

Menditto does not explicitly disclose that the media is a streaming media.

However, Bochmann discloses the media is a streaming media (section 1-introduction, section 4, selection of server from a pool of servers for multimedia sessions such as video-on-demand using a QoS-broker)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Menditto and Bochmann in order to provide a multimedia QoS management scheme in order to optimize the overall cost-performance of the system and the users satisfaction (Bochmann, section 1-introduction)

24. For claims 6 and 26, Menditto-Bochmann discloses the invention substantially as in claims 5 and 25. Menditto-Bochmann further discloses said static service provider and network information is accessible by a service location manager (Menditto, col. 3 lines 51-61).

25. For claims 7 and 27, Menditto-Bochmann discloses the invention substantially as in claims 5 and 25. Menditto further discloses said static service provider and network information comprises information concerning computational and memory resources, connectivity and expected bandwidth and latency between servers (Menditto, col.3 line 60, which server is most heavily loaded, meaning available computational and memory resources and bandwidth are considered, col. 2 lines 64-66, best response time or best latency), client and content addresses (Menditto, col. 6 lines 25-30), session dispatch history (Menditto, col. 4 lines 32-34, requests for components of a same web page belong to a same session), network proximity (Menditto, col. 3, lines 11-16) and the identity of special purpose hardware (Menditto, fig. 2, hardware such as content gateway, CDN, and content servers have corresponding IP addresses).

26. For claims 8 and 28, Menditto-Bochmann discloses the invention substantially as in claims 5 and 25. Menditto-Bochmann further discloses said special purpose hardware comprises encryption and compression hardware (Bochmann, table 1, encryption, table 3, multimedia compression).

27. For claims 9 and 29, Menditto-Bochmann discloses the invention substantially as in claims 5 and 25. Menditto-Bochmann further discloses said service session information comprises service session initiation and termination information (Bochmann, section 4.1, status of the network connection between the client and the server).

28. For claims 10 and 30, Menditto-Bochmann discloses the invention substantially as in claims 9 and 29. Menditto-Bochmann further discloses said initiation and termination information provides information regarding the computational resources used in previous sessions (Bochmann, section 4.1, lines 7-8, information regarding the computational resources is pushed or requested to the QoS-broker).

29. For claims 11 and 31, Menditto-Bochmann discloses the invention substantially as in claims 6 and 27. Menditto-Bochmann further discloses said session dispatch history comprises information concerning content length (Bochmann, section 4.1 line 4-5, size of the requested files or content length).

30. For claims 12 and 32, Menditto-Bochmann discloses the invention substantially as in claims 5 and 29. Menditto-Bochmann further discloses said streaming content is serviced and delivered to a client device as it is received (Bochmann, table 1, encryption, streaming content that does not require encryption may be delivered as is).

31. For claims 13 and 33, Menditto-Bochmann discloses the invention substantially as in claims 12 and 32. Menditto-Bochmann further discloses non streamed content is generated from said streaming content by said service provider (Bochmann, table 1, encryption, non streamed content is just streaming content that was encrypted since non stream content may not be played until being decrypted).

32. For claims 14 and 34, Menditto-Bochmann discloses the invention substantially as in claims 13 and 29. Menditto-Bochmann further discloses said streaming content is serviced by said service provider and delivered to a client device as a non streamed file (Bochmann, table 1, encryption, non streamed content is just streaming content that was encrypted to be delivered to the user, non stream content may not be played until being decrypted).

33. For claims 18 and 38, the claims are rejected for the same rationale as in claim 8.

34. For claims 19 and 39, the claims are rejected for the same rationale as in claim 9.

35. For claims 20 and 40, the claims are rejected for the same rationale as in claim 10.

36. For claims 21 and 41, the claims are rejected for the same rationale as in claim 11.

37. For claims 22 and 42, the claims are rejected for the same rationale as in claim 12.

38. For claims 23 and 43, the claims are rejected for the same rationale as in claim 13.

39. For claims 24 and 44, the claims are rejected for the same rationale as in claim 14.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Mandato et al. US 2004/0139088. Achieving end-to-end QoS negotiations.
- Tso. US 6,959,318. Proxy assisted predictive pre-fetching with transcoding.
- Albert et al. US 6,633,560. Distribution of network services among multiple service managers.
- O'Dell et al. US 6,891,825. Providing multi-user access to a packet switched network.
- Cloutier et al. US 2004/0015405. End-user service provider selection.
- Huddle. US 6,950,407. Settlement of multi-connected packet switched network.

41. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

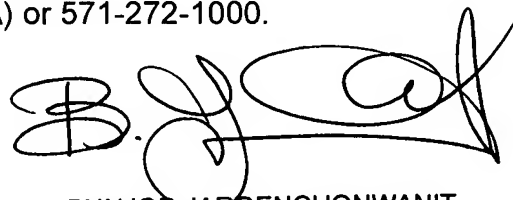
42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

#14

HH



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

8/3/7